



sports



an Open Access Journal by MDPI

Effects of Resistance Exercise Variables on Muscle Adaptation and Physical Performance

Guest Editor:

Prof. Dr. Sebastian Gehlert

1 Institute of Sports Science,
University of Hildesheim,
Hildesheim, Germany;
2 Institute of Cardiovascular
Research and Sports Medicine,
Department for Molecular and
Cellular Sports Medicine, German
Sport University Cologne,
Cologne, Germany

Deadline for manuscript
submissions:

closed (30 November 2021)

Message from the Guest Editor

Skeletal muscle is a prerequisite for directed movement of humans and physical performance in sports. Due to its ability to adapt to a wide range of mechanical and metabolic stimuli, exercise provides the fundamental basis for performance enhancement. Resistance exercise is a highly potent method to increase skeletal muscle mass and force generation in humans, a key factor for performance in many disciplines. Research in recent decades has generated a profound knowledge of molecular mechanisms that explain skeletal muscle adaptation towards resistance exercise. Major mechanisms that maintain skeletal muscle proteostasis in mechanically loaded human skeletal muscle, involve molecular networks that control synthesis and degradation of functional proteins within myofibers.



mdpi.com/si/47550

Special Issue



sports



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Eling Douwe De Bruin

1. Institute of Human Movement
Sciences and Sport, IBWS ETH,
HCP H 25.1, Leopold-Ruzicka-
Weg 4, CH-8093 Zürich,
Switzerland
2. Karolinska Institutet,
Stockholm, Sweden

Message from the Editor-in-Chief

Sports (ISSN 2075-4663) is a peer-reviewed scientific journal that publishes original articles, critical reviews, research notes and short communications in the interdisciplinary area of sport sciences and public health. It links several scientific disciplines in an integrated fashion, to address critical issues related to sport science and public health. The journal presents diverse original articles, including systematic and narrative reviews, cohort and case control studies, innovative randomized trials, and formative research using qualitative and quantitative methods with the aim to provide information for researchers to plan intervention programs. It addresses diverse public health, physical activity and exercise science topics.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, ESCI (Web of Science), PubMed, PMC, and other databases.

Journal Rank: JCR - Q2 (*Sport Sciences*) / CiteScore - Q2 (*Physical Therapy, Sports Therapy and Rehabilitation*)

Contact Us

Sports Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sports
sports@mdpi.com
X@Sports_MDPI